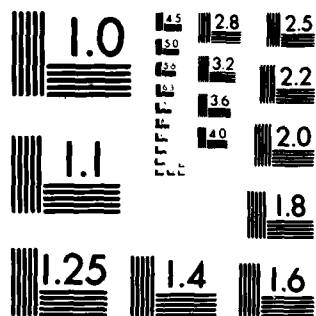


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193040 GSRS, MISSILE NUMBER 1097, ROUND NUMBER V-89, 19 NOVEMBE--ETC(U)
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ATMOSPHERIC SCIENCE DATA REPORT

REPORT NO. 1079
SERIAL NO. 1
15 November 1979

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19304D GSRS, Missile Number 1097, Round Number V-89 are presented in tabular form.		

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INTRODUCTION

19304D GSRS, Missile Number 1097, Round Number V-89,
was launched from LC-33, White Sands Missile Range (WSMR), New Mexico,
at 1415 MST on 19 Nov 79. The scheduled launch time was
1400.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), Wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

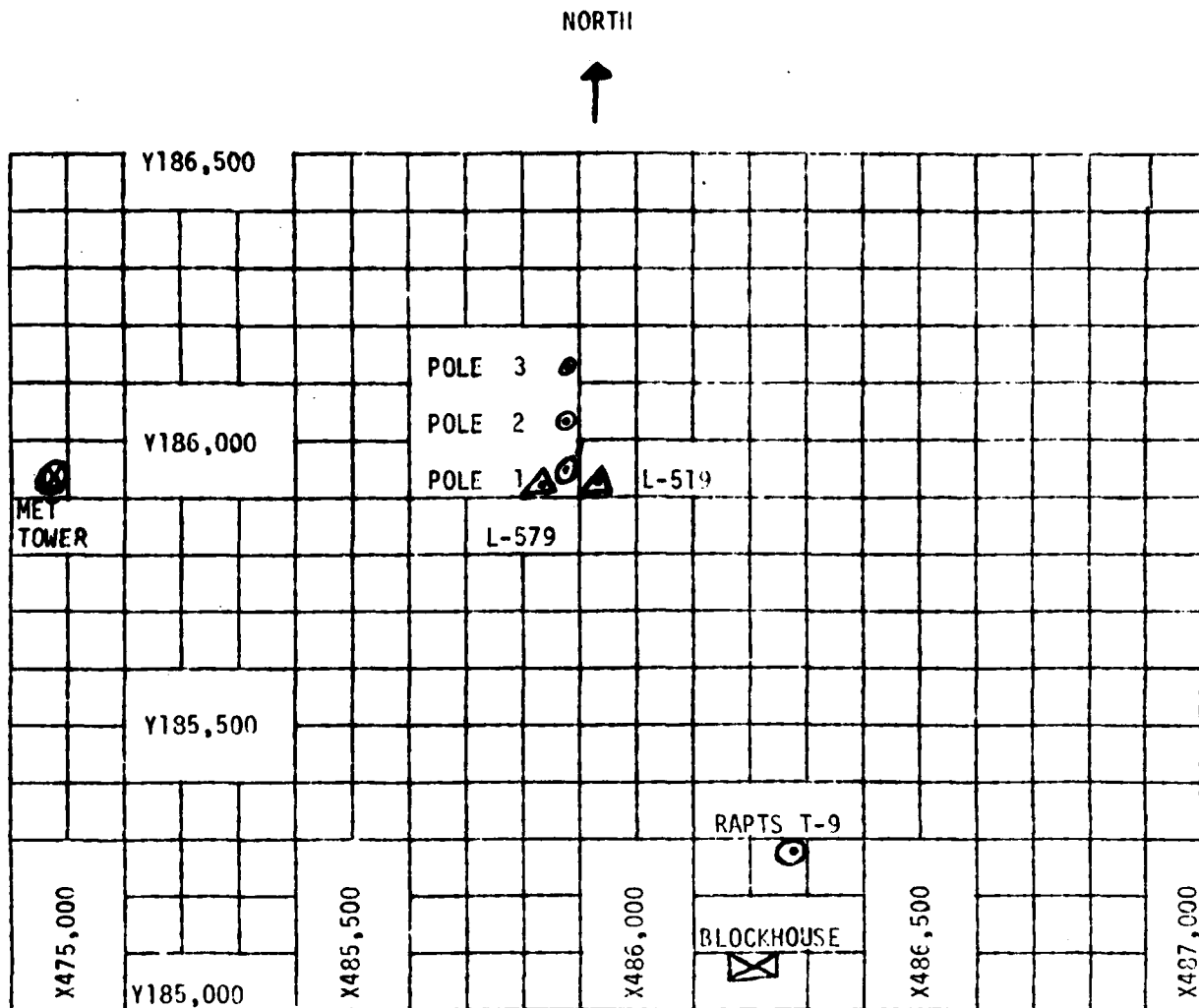
SITE AND ALTITUDE

LC-33	2km
Nick	2km

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 78,000 feet in 500-foot increments.

SITE AND TIME

SMR	1400 MST
-----	----------



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft.
 - (b) Pole #2 - 53.0 ft.
 - (c) Pole #3 - 83.6 ft.
3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

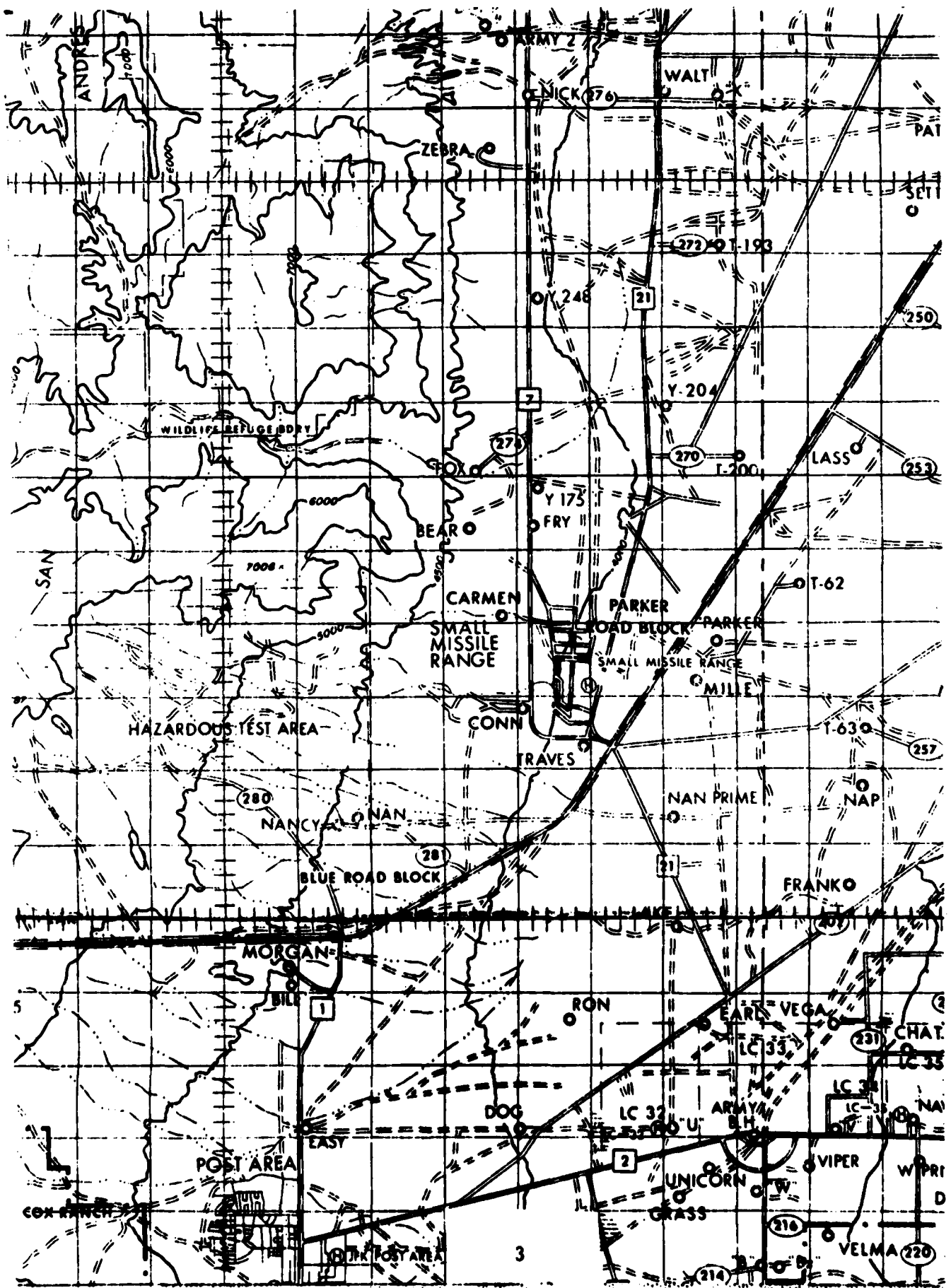


TABLE 1. Surface Observations taken at 1415 MST,
19 November 1979, at LC-33, 19304D GSRS,
Missile Number 1097, Round Number V-89.

ELEVATION	3977.30	FT/MSL
PRESSURE	875.4	MBS
TEMPERATURE	21.0	°C
RELATIVE HUMIDITY	31	%
DEW POINT	3.3	°C
DENSITY	1037	GM/M ³
WIND SPEED	16	KTS
WIND DIRECTION	193	DEGREES
CLOUD COVER	5	Cu
CLOUD COVER	2	C1

TABLE 2

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	188	11	-30	191	09	-30	180	13
-20	193	13	-20	193	11	-20	192	11
-10	196	15	-10	206	13	-10	191	13
0.0	193	17	0.0	209	14	0.0	189	16
+10	203	13	+10	192	10	+10	192	12

TABLE 3

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	178	07	-30	190	09
-20	175	07	-20	185	12
-10	176	12	-10	187	12
0.0	MISG	MISG	0.0	180	15
+10	178	10	+10	179	13

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	186	10	-30	177	18
-20	188	11	-20	180	17
-10	183	11	-10	177	17
0.0	180	13	0.0	177	17
+10	180	12	+10	177	16

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-33

DATE 19 November 1979

TIME 1350 MST

TRACKER

COORDINATES (WSTM)

X= 486,037.24

$$Y = 182,350.16$$

H = **3977.30**

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL XX OR FEET AGL .

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 5

RELEASED FROM LC-33 DATE 19 November 1979 TIME 1415 MST

TRACKER COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL xx OR FEET AGL .

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 6

RELEASED FROM Nick Site DATE 19 November 1979 TIME 1351 MST

TRACKER COORDINATES (WSTM) X= 470,734.56 Y= 255,775.64 H= 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGLXX OR FEET AGL .

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 7

RELEASED FROM Nick Site DATE 19 November 1979 TIME 1415 MST

TRACKER COORDINATES (WSTM) X= 470, 734.56 Y= 255,775.64 H= 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL yy OR FEET AGL .

[illegible][illegible][illegible]

STATION ALTITUDE 3997.30 FEET MSL
19 NOV. 79
ASCENSION I.O. 378

SIGNIFICANT LEVEL DATA
3230060378
S M R
TABLE 8

GEODETTIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
875.0	3997.3	3.0	35.0
850.0	4811.4	3.9	44.0
761.8	7820.8	-2.0	53.0
751.0	8206.0	-3.3	64.0
700.0	10033.0	-2.2	80.0
679.6	10862.9	-5.3	70.0
660.6	11606.0	-7.1	70.0
651.2	11920.0	-13.0	45.0
641.6	12366.1	-22.3	18.0
623.2	13129.2	-23.2	18.0
570.2	15427.1	-27.0	19.0
528.6	17348.3	-29.2	23.0
500.0	18737.9	-33.1	20.0
489.2	19279.8	-33.0	21.0
409.6	23596.0	-36.7	36.0
400.0	24160.2	-30.3	71.0
396.4	24374.7	-30.6	73.0
383.4	25163.0	-34.1	59.0
370.6	25959.5	-35.2	67.0
352.2	27141.8	-40.4	50.0
322.6	29150.0	-45.2	47.0
317.2	29531.8	-44.6	55.0
306.0	30343.0	-43.6	62.0
300.0	30768.6	-45.2	59.0
279.4	32375.2	-50.2	47.0
259.0	34809.2		
239.8	35706.4		
217.2	37823.0		
200.0	39565.8		
184.2	41310.6		
172.4	42685.3		
153.6	45061.6		
150.0	45545.6		
146.4	46041.7		
132.6	48052.6		
115.8	50781.9		
107.3	52328.4		
100.0	53765.1		
79.2	58501.1		
71.3	60609.0		

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

SIGNIFICANT LEVEL DATA
 3230060378
 S M R

TABLE 8 (cont)

STATION ALTITUDE 3997.30 FEET MSL
 19 NOV. 79
 ASCENSION NO. 378

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
70.0 60974.4	-67.3		
62.0 63424.7	-61.5		
52.2 66362.8	-59.7		
50.0 67849.7	-60.9		
45.8 69645.2	-62.5		
37.8 73601.9	-58.0		
30.0 78417.6	-58.0		

UPPER AIR DATA
3230060378
S M R
TABLE 9

STATION ALTITUDE 3997.30 FEET MSL
19 NOV. 79 1400 HRS MST
ASCENSION NO. 378

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (TN)	SPEED KNOTS	
3997.3	875.0	19.5	3.6	35.0	1038.0	667.6	190.0	15.9	1.000266
4000.0	874.9	19.5	3.7	35.0	1036.0	667.6	190.0	15.9	1.000266
4500.0	859.5	17.4	3.9	40.6	1026.8	665.2	189.1	16.6	1.000265
5000.0	844.2	15.5	3.5	44.6	1015.2	663.1	188.3	17.2	1.000262
5500.0	829.0	14.0	2.6	46.1	1002.3	661.3	187.5	17.8	1.000257
6000.0	814.0	12.5	1.6	47.6	989.7	659.4	186.8	18.5	1.000252
6500.0	799.3	10.9	.7	49.1	977.2	657.6	189.6	18.4	1.000248
7000.0	784.9	9.4	-.3	50.5	964.9	655.8	194.8	17.9	1.000243
7500.0	770.7	7.9	-1.3	52.0	952.8	654.0	200.4	17.8	1.000239
8000.0	756.8	6.5	-1.1	58.1	940.1	652.4	207.4	19.1	1.000237
8500.0	742.8	5.2	-.5	66.5	926.9	650.9	212.2	20.3	1.000235
9000.0	729.0	3.8	-1.0	70.8	914.3	649.3	215.5	21.2	1.000232
9500.0	715.5	2.4	-1.5	75.0	901.9	647.6	218.0	21.4	1.000228
10000.0	702.2	1.0	-2.1	79.3	889.7	646.0	221.1	22.2	1.000225
10500.0	689.0	.1	-3.8	74.7	876.2	644.8	223.4	24.5	1.000219
11000.0	676.1	-.9	-5.6	70.0	863.0	643.6	224.4	28.6	1.000213
11500.0	663.3	-2.1	-6.8	70.0	850.8	642.0	224.0	33.8	1.000208
12000.0	650.7	-2.6	-13.3	43.6	836.8	641.2	224.7	36.9	1.000198
12500.0	638.4	-1.3	-22.5	18.0	817.5	642.6	225.9	38.4	1.000187
13000.0	626.3	-1.9	-23.0	18.0	804.0	641.8	226.9	39.5	1.000184
13500.0	614.3	-3.0	-23.8	18.2	791.6	640.5	227.7	40.3	1.000181
14000.0	602.6	-4.1	-24.6	18.4	779.8	639.2	228.2	41.3	1.000178
14500.0	591.0	-5.3	-25.4	18.6	768.2	637.8	226.7	43.4	1.000175
15000.0	579.7	-6.4	-26.3	19.8	756.8	636.4	225.3	45.7	1.000172
15500.0	568.6	-7.6	-27.1	19.2	745.5	635.0	223.5	47.7	1.000170
16000.0	557.5	-8.9	-27.6	20.2	734.6	633.4	220.1	49.4	1.000167
16500.0	546.6	-10.2	-29.2	21.2	723.8	631.9	217.0	51.1	1.000164
17000.0	535.9	-11.5	-28.8	22.3	713.2	630.3	214.9	51.4	1.000162
17500.0	525.4	-12.7	-29.6	22.7	702.5	628.8	213.5	51.8	1.000159
18000.0	515.0	-13.8	-31.0	21.6	691.4	627.5	214.5	52.2	1.000157
18500.0	504.8	-14.8	-32.4	20.5	680.5	626.3	215.6	52.3	1.000154
19000.0	494.7	-15.5	-33.1	20.5	669.9	625.4	216.8	52.2	1.000151
19500.0	484.8	-16.3	-33.1	21.8	657.4	624.4	216.9	51.0	1.000149
20000.0	474.9	-17.3	-33.4	21.5	647.0	623.0	216.7	49.6	1.000146
20500.0	465.2	-18.7	-33.7	25.2	636.8	621.5	217.9	48.8	1.000144
21000.0	455.8	-19.9	-34.0	27.0	626.8	620.0	219.4	48.0	1.000142
21500.0	446.5	-21.1	-34.5	28.7	616.9	618.6	222.1	49.0	1.000139
22000.0	437.4	-22.3	-34.9	30.5	607.3	617.1	225.0	50.6	1.000137
22500.0	428.5	-23.5	-35.4	32.2	597.7	615.6	227.2	52.4	1.000135
23000.0	419.8	-24.7	-36.0	33.9	588.4	614.2	228.4	54.6	1.000133

STATION ALTITUDE 3997.30 FEET MSL
19 NOV. 79
ASCENSION NO. 378

UPPER AIR DATA
3230060378
S M R
TABLE 9 (cont)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	411.2	-25.9	-36.5	35.7	579.2	612.7	229.0	56.8	1.000131
24000.0	402.7	-26.5	-31.7	61.1	568.6	611.9	229.9	57.2	1.000129
24500.0	394.5	-27.5	-31.2	70.8	559.0	610.7	229.9	57.1	1.000127
25000.0	386.1	-28.3	-33.3	61.9	549.1	609.7	229.9	57.0	1.000125
25500.0	377.9	-29.7	-34.5	62.4	540.5	609.0	229.7	56.7	1.000122
26000.0	370.0	-31.2	-35.3	65.4	532.5	606.1	229.6	57.2	1.000121
26500.0	362.1	-32.2	-37.5	59.2	523.4	604.7	229.5	59.6	1.000118
27000.0	354.4	-33.3	-39.7	52.0	514.6	603.4	229.5	61.9	1.000116
27500.0	346.7	-34.4	-41.3	49.5	505.9	602.0	229.7	64.2	1.000114
28000.0	339.2	-35.6	-42.5	48.7	497.3	600.5	230.1	66.2	1.000112
28500.0	331.9	-36.7	-43.7	48.0	488.9	599.1	230.9	67.7	1.000110
29000.0	324.7	-37.9	-44.9	47.2	480.7	597.6	231.9	69.2	1.000108
29500.0	317.6	-38.9	-44.6	54.3	472.4	596.3	233.4	70.8	1.000106
30000.0	310.7	-39.2	-44.1	59.0	462.5	596.0	234.5	72.5	1.000104
30500.0	303.9	-39.7	-44.3	60.9	453.3	595.3	235.3	74.5	1.000102
31000.0	297.2	-40.7	-45.8	57.4	445.4	594.0	236.2	76.6	1.000100
31500.0	290.6	-41.7	-47.4	53.6	437.4	592.7	237.0	78.8	1.000098
32000.0	284.1	-42.7	-49.0	49.8	429.6	591.4	238.5	81.0	1.000096
32500.0	277.8	-43.8	-50.9	44.6**	421.9	590.0	240.4	83.2	1.000094
33000.0	271.5	-44.9	-53.9	34.9**	414.4	588.6	241.8	85.7	1.000093
33500.0	265.4	-46.0	-57.5	25.3**	407.0	587.2	242.9	88.3	1.000091
34000.0	259.4	-47.1	-62.2	15.6**	399.8	585.7	242.4	91.2	1.000089
34500.0	253.6	-48.2	-70.0	6.0**	392.7	584.3	241.6	94.2	1.000087
35000.0	247.8	-49.3			385.7	582.8	240.6	93.3	1.000086
35500.0	242.1	-50.4			378.7	581.4	239.7	91.7	1.000084
36000.0	236.5	-50.9			370.8	580.8	239.5	85.2	1.000083
36500.0	231.1	-50.9			362.2	580.8	239.5	78.8	1.000081
37000.0	225.8	-50.9			353.9	580.8	240.0	73.2	1.000079
37500.0	220.6	-50.9			345.7	580.8	240.6	68.0	1.000077
38000.0	215.5	-51.2			338.2	580.4	241.2	64.8	1.000075
38500.0	210.5	-52.1			331.7	579.2	242.0	61.7	1.000074
39000.0	205.6	-53.0			325.4	578.0	242.5	57.1	1.000072
39500.0	200.8	-53.9			319.1	576.8	243.0	52.5	1.000071
40000.0	196.1	-55.0			313.1	575.4	242.7	48.6	1.000070
40500.0	191.5	-56.1			307.3	573.9	242.2	45.2	1.000068
41000.0	187.0	-57.2			301.6	572.5	240.7	46.9	1.000067
41500.0	182.5	-57.9			295.5	571.5	239.4	48.9	1.000066
42000.0	178.2	-58.1			288.6	571.4	239.0	51.3	1.000064
42500.0	173.9	-50.2			281.9	571.2	238.7	54.6	1.000063
43000.0	169.8	-58.7			275.8	570.5	238.7	55.9	1.000061

UPPER AIR DATA
3230060376
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TABLE 9 (cont)

STATION ALTITUDE 3997.30 FEET NSL
19 NOV. 79
ASCENSION NO. 378

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE NSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	165.7	-59.4		270.1	569.5	238.7	57.1	1.000060
44000.0	161.7	-60.2		264.6	568.5	237.6	56.3	1.000059
44500.0	157.8	-60.9		259.1	567.5	236.4	55.4	1.000058
45000.0	154.1	-61.7		253.8	566.5	234.6	53.4	1.000057
45500.0	150.3	-61.8		247.8	566.4	232.4	51.1	1.000055
46000.0	146.7	-61.6		241.6	566.6	230.4	49.4	1.000054
46500.0	143.1	-62.2		236.3	565.9	228.4	48.2	1.000053
47000.0	139.7	-62.8		231.3	565.0	227.2	47.2	1.000052
47500.0	136.5	-63.4		226.3	564.2	227.1	46.7	1.000050
48000.0	132.9	-64.0		221.5	563.4	227.5	46.4	1.000049
48500.0	129.7	-64.3		216.3	563.1	229.8	46.9	1.000048
49000.0	126.5	-64.4		211.2	562.8	232.0	47.6	1.000047
49500.0	123.4	-64.6		206.2	562.6	233.5	49.5	1.000046
50000.0	120.4	-64.8		201.3	562.3	234.9	51.5	1.000045
50500.0	117.4	-65.0		196.5	562.1	235.0	52.2	1.000044
51000.0	114.5	-64.6		191.3	562.7	235.1	52.8	1.000043
51500.0	111.5	-63.3		185.6	564.3	235.3	51.8	1.000041
52000.0	109.1	-62.1		180.0	566.0	235.5	50.5	1.000040
52500.0	106.4	-61.5		175.1	566.8	236.0	48.1	1.000039
53000.0	103.8	-62.1		171.4	566.0	236.6	45.5	1.000038
53500.0	101.3	-62.7		167.7	565.2	237.7	41.7	1.000037
54000.0	98.8	-63.0		163.9	564.7	239.3	37.4	1.000036
54500.0	96.4	-63.0		159.9	564.7	241.4	33.7	1.000036
55000.0	94.1	-63.0		156.0	564.7	244.0	30.3	1.000035
55500.0	91.6	-63.0		152.2	564.7	247.2	27.6	1.000034
56000.0	89.6	-63.0		148.5	564.7	250.6	25.7	1.000033
56500.0	87.4	-63.1		144.9	564.7	253.6	24.4	1.000032
57000.0	85.3	-63.1		141.4	564.7	253.8	24.3	1.000031
57500.0	83.2	-63.1		138.0	564.6	253.3	24.3	1.000031
58000.0	81.2	-63.1		134.6	564.6	249.3	24.6	1.000030
58500.0	79.2	-63.1		131.4	564.6	245.4	25.0	1.000029
59000.0	77.3	-64.3		128.9	563.0	242.3	24.5	1.000029
59500.0	75.4	-65.6		126.5	561.3	239.3	23.6	1.000028
60000.0	73.5	-66.8		124.1	559.6	236.2	22.6	1.000028
60500.0	71.7	-68.0		121.8	558.0	233.7	20.8	1.000027
61000.0	69.9	-67.2		118.3	559.0	230.6	19.0	1.000026
61500.0	68.2	-66.1		114.7	560.5	226.3	17.0	1.000026
62000.0	66.5	-64.8		111.3	562.2	220.3	15.1	1.000025
62500.0	64.9	-63.7		107.9	563.8	213.2	13.5	1.000024
63000.0	63.3	-62.5		104.7	565.4	209.4	12.5	1.000023

UPPER AIR DATA
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STATION ALTITUDE 3997.30 FEET MSL
19 NOV. 79 1400 HRS MST
ASCENSION NO. 378

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 9 (cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	61.8	-61.5		101.7	566.8	204.9	11.6	1.000023
64000.0	60.3	-61.2		99.1	567.2	206.4	10.4	1.000022
64500.0	58.8	-61.0		96.6	567.5	210.6	9.1	1.000022
65000.0	57.4	-60.7		94.2	567.8	217.1	8.0	1.000021
65500.0	56.0	-60.4		91.8	568.2	226.7	7.1	1.000020
66000.0	54.7	-60.2		89.5	568.5	238.0	6.5	1.000020
66500.0	53.4	-59.9		87.2	568.9	236.2	6.7	1.000019
67000.0	52.1	-59.8		85.1	569.1	234.5	6.9	1.000019
67500.0	50.9	-60.4		83.3	568.2	233.4	7.0	1.000019
68000.0	49.6	-61.0		81.5	567.4	232.9	7.1	1.000018
68500.0	48.4	-61.5		79.7	566.8	232.4	7.2	1.000018
69000.0	47.3	-61.9		78.0	566.2	241.8	7.1	1.000017
69500.0	46.1	-62.4		76.2	565.6	251.7	7.3	1.000017
70000.0	45.0	-62.1		74.3	566.0	258.9	7.7	1.000017
70500.0	43.9	-61.5		72.3	566.7	262.1	8.4	1.000016
71000.0	42.9	-61.0		70.4	567.5	264.8	9.1	1.000016
71500.0	41.9	-60.4		68.5	568.3	263.9	9.0	1.000015
72000.0	40.9	-59.8		66.7	569.0	262.2	8.7	1.000015
72500.0	39.9	-59.3		64.9	569.8	261.8	8.1	1.000014
73000.0	38.9	-58.7		63.2	570.5	269.1	6.0	1.000014
73500.0	38.0	-58.1		61.5	571.3	263.7	4.0	1.000014
74000.0	37.1	-58.0		60.0	571.4	315.4	2.3	1.000013
74500.0	36.2	-58.0		58.6	571.4	27.5	2.2	1.000013
75000.0	35.3	-58.0		57.2	571.4	58.0	4.2	1.000013
75500.0	34.5	-58.0		55.9	571.4	79.6	5.5	1.000012
76000.0	33.7	-58.0		54.6	571.4	94.0	7.1	1.000012
76500.0	32.9	-58.0		53.3	571.4			1.000012
77000.0	32.1	-58.0		52.0	571.4			1.000012
77500.0	31.4	-58.0		50.8	571.4			1.000011
78000.0	30.6	-58.0		49.6	571.4			1.000011

STATION ALTITUDE 3997.30 FEET MSL
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MANDATORY LEVELS
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TABLE 10

GEODETTIC COORDINATES
32.46034 LAT DEG
106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4808.	16.1	3.9	44.	168.6	17.0
800.0	6484.	11.0	.7	49.	189.4	18.4
750.0	8235.	5.9	-.3	64.	210.2	19.7
700.0	10073.	.8	-2.2	80.	221.6	22.3
650.0	12015.	-2.5	-13.7	42.	224.7	36.9
600.0	14099.	-4.4	-24.8	16.	227.8	41.7
550.0	16326.	-9.8	-28.0	21.	217.9	50.6
500.0	18712.	-15.3	-33.1	20.	216.2	52.3
450.0	21299.	-20.6	-34.3	26.	221.1	48.5
400.0	24120.	-26.7	-30.3	71.	229.9	57.2
350.0	27237.	-33.9	-40.7	50.	229.6	63.2
300.0	30728.	-40.3	-45.2	59.	235.7	75.6
250.0	34734.	-48.9			241.0	93.7
200.0	39491.	-54.1			243.0	51.9
175.0	42258.	-58.1			238.8	53.9
150.0	45424.	-61.8			232.3	51.0
125.0	49103.	-64.5			232.7	48.4
100.0	53600.	-63.0			238.4	39.6
80.0	58105.	-63.1			247.2	24.8
70.0	60757.	-67.3			230.9	19.2
60.0	63859.	-61.2			206.9	10.2
50.0	67596.	-60.9			233.1	7.1
40.0	72141.	-59.3			260.7	8.5
30.0	78065.	-58.0				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.